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means. The frame is sealed, and the two parts are two pieces assembled transversally one onto the other. The end wall of each part is continuously adjacent to one of the first and second ends of the coil.

Please replace paragraph [0016] with the following paragraph:

the heat conducting material is not magnetic and is advantageously chosen from the group containing "zamac," aluminum, and magnesium in order to reduce the weight of the motor and to facilitate its creation via casting;

Please replace paragraph [0019] with the following paragraph:

at least one of the two pieces of the frame comprises an end of the wall and a radial orientation portion that contains, on the outside, elements that contribute to the increase in thermal changes with ambient air;

Please replace paragraph [0022] with the following paragraph:

at least one or the other of the two pieces of the frame comprises a wall end and circumferential part; and

Please replace paragraph [0030] with the following paragraph:

The electric motor that is represented in Fig. 1 is a closed direct current electric motor, that comprises a hollow frame 1, as well as a coiled rotor 2 carried by a shaft 3 mounting rotating between two bearings 4, 5 mounted in the frame 1, made up of ball bearings in this method of production. The shaft 3 carries between these two bearings 4, 5 a packet of coupled sheet metal 20, each having notches in the shape of a V in order to make up radial grooves 30. These grooves are designed to wrap around several conductor threads, here in copper, in order to form a coil 21. This coil thus has, projecting in relation to the packet 20, and at each of its ends, a first and second radial end, 22 and 23, in the shape of buns.

Please replace paragraphs [0033] to [0037] with the following paragraphs:

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The two pieces 6,7 each have a ring-shaped portion 6a, 7a with radial orientation, the interior surface of which is of a cylindrical shape, and a bottom portion 6b, 7b, with transversal orientation, that ends the portion 6a, 7a at an end. The bottom 6b receives the bearing 4 that makes the rear bearing; and the bottom 7b is crossed by the shaft 3 and is prolonged by an overhang 16 that receives the front bearing 5, as well as the manifold 14 of the motor. It also has lodgings 15 for charcoal 15'.

The frame 1 carries a ring inductor 8 and magnets 9. In order to do this, the frame receives in its interior a tubular ring, or tube, 8 in a magnetic or magnetizable material, for example, soft iron.

The frame 1 also receives permanent magnets 9 that are placed on the interior of the tube 8 and the magnetic field of which surrounds the tube 8. A weak air-gap is placed between the packet of steel 20 and the magnets 9, allowing the increase of the motor's performance.

The tube 8 and the magnets 9 are held in place via a built-in in the frame 1 by interior holes 10 that have bottoms 6b, 7b and in which the edges of the tube 8 and the magnets 9 are received. This built-in allows, via cooperation, the shapes to free themselves from springs normally used for assembling the bearings of the tube. In addition, the replacement of these springs by the heat conducting material between the holes 10 allows the more efficient removal of heat because the coil of the conductor thread in the grooves 30 are adjacent to this material that advantageously reaches radially from one bottom 6b to the other 7b.

The bottoms 6b, 7b, each transversally making up an end wall for the piece 6, 7, respectively, also having an interior with a bowl shape that envelopes the radial ends 22, 23 of the coil 21 of the rotor 2. These ends 22, 23 are according to the invention, continually adjacent to the bottoms 6b, 7b, which allows the minimization of the space between these bottoms 6b, 7b and the ends 22, 23. As a consequence, the radiation energy by the ends 22, 23 is transmitted over the entire frame and removed in an optimized manner.

Please replace paragraph [0039] with the following paragraph:

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In addition, the bottoms 6b, 7b of the frame, making up end walls, have centrally the shape of a bowl in order to receive in a complementary manner the buns 22, 23 of the coil 21. This arrangement minimizes the distance between the coil and the frame 1, which allows the optimization of the cooling of the inductor by the frame 1.

Please replace paragraph [0041] with the following paragraph:

In addition, the structure described allows the casting of one of the two pieces 6, 7, that make up the frame 1 – and specifically that which defines the front bearing of the motor – in such a way that it is a piece with at least one gear box casing part, the overhang 16, of the actuator to which the motor is associated. Also, the piece that is cast in one piece with at least one gearbox casing part can be in a different material, with a similar magnetic nature or different in relation to the other piece.

Please replace paragraph [0043] with the following paragraph:

In the example illustrated in Fig. 1, the piece 6 has more than one fixation lug 13 that, other than their mechanical function, also allows the augmentation of the volume of the frame 1 and thus the thermal changes via convection and radiation with the ambient air and via conduction with the support on which the lugs 13 are attached. In addition, the fact that the fixation lugs 13 are placed to the right of the steel packet 20 allows the diminishing the chance of being unbalanced and thus to improve the holding of the rotor 2.

Please replace paragraph [0046] with the following paragraph:

Other production variations of the invention are also very possible. For example, the two pieces 6, 7 of the frame 1 can carry fixation lugs and cooling fins. Each piece can contain at least one fixation lug interrupting the corresponding flange.

Please replace paragraph [0048] with the following paragraph: